

REMARKS

The Examiner's communication dated July 30, 2008, has been received and carefully considered. In conformance with the applicable statutory requirements, this paper constitutes a complete reply and/or a bona fide attempt to advance the application to allowance. Specifically, claims 13, 37 and 174 have been amended. Reexamination and/or reconsideration of the application as amended are respectfully requested.

Summary of the Office Action

Claims 22, 33, 34, 49 and 52 were indicated as containing allowable subject matter.

Claims 13-21, 23-32, 35-48, 50, 51, 53 and 174 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kelsey (U.S. Patent No. 5,967,289) in view of Piron (U.S. Patent No. 6,419,073).

The July 30, 2008, Office Action did not address claims 175 and 176 which were newly submitted by the response filed on March 25, 2008, and the status of these claims is unknown. Applicants note the Examiner's indication that, in view of this, he would withdraw the finality of the July 30, 2008, Office Action.

On July 25, 2008, Applicants electronically filed the Declaration Of Roger Alderink (the "Declaration"), which was not addressed in the July 30, 2008, Office Action. Applicant's also note the Examiner's indication that he would consider the Declaration in the next Office Action.

The Claims Distinguish Patentably Over the Reference(s) of Record

Claims 13, 37 and 174, as amended, each recite a plurality of pushers, and a divert guide path or a plurality of divert guide paths. Claims 13 and 174 recite the divert guide paths as comprising an arcuate portion with an entrance disposed at a divert angle of less than 20°. Claim 37 recites that the divert guide path comprises a plurality of divert angles and includes an initial contact zone with an initial contact zone portion disposed at a divert angle of less than 20°. Added to each of these claims by this amendment is that the divert guide path or arcuate portion is

configured to guide pushers traveling along said divert guide path to distribute force necessary to laterally accelerate said selected one of said articles being diverted toward said divert location over a longitudinal and lateral distance

without an abrupt initial force being applied to said selected one of said articles by said pushers so as to maintain control of said selected one of said articles while said selected one of said articles is being diverted.

Claims 13, 37 and 174 each recite a plurality of pushers and are thusly directed to positive sortation sorters. The Declaration references “positive sortation sorters”.

The Examiner asserts that the rejected claims are obvious under 35 U.S.C. §103(a) based on Kelsey (USP 5,967,289) in view of Piron (USP 6,419,073). The Examiner asserted that Piron discloses an arcuate guide portion, and that it would have been obvious to one of ordinary skill in the art to include such an arcuate guide portion on Kelsey.

Piron is non-analogous art and cannot be used in combination with Kelsey. There are two criteria used by the Federal Circuit to determine the scope of the prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed; and (2) if the reference is not within the field of the inventor’s endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. As evidenced by the application and the Declaration, Piron is not in the same field of endeavor, and is not reasonably pertinent to the particular problem with which the inventor is involved.

The Examiner must determine the proper field of endeavor according to the explanations of the inventor’s subject matter in the patent application, including the embodiments, function, and structure of the claimed invention. At paragraph 2 of the application, the inventors state:

This invention relates to a sortation conveyor with pusher shoes which travel laterally (transverse to the longitudinal direction of travel of the sortation conveyor) to divert articles carried by the upper conveying surface of the sortation conveyor to divers, and more particularly to a sortation conveyor in which the pushers are guided along divert guide paths so as to gently engage and gradually accelerate conveyed articles, such as cartons, laterally onto the divers.

The claims are directed to a positive sortation sorter, in which articles are diverted laterally off the side of the sorter. Piron is an aligner, carrying loads on top of platens which travel longitudinally (the machine direction) with the platens moveable to create at least two longitudinal paths. The Declaration indicates that the device disclosed by Piron is “used in a different industry and its application is for moving product from one conveyor line to another line that is running parallel” ¶7, and that “none of the engineers or other persons who design or

develop positive sortation sorters, even if familiar with the type of device disclosed by the [Piron] patent, would consider such type of device relevant to overcoming the problems of increasing the cartons per minute rate or operating sorters at higher speeds” ¶7. Applicants note that the second Declaration statement addresses all persons who design or develop positive sortation sorters, which encompasses persons having ordinary skill in this art. Thus, it is clear that there is no support for an assertion that a person of ordinary skill in the art would consider Piron to be in the same field of endeavor as the present invention.

Since Piron is not in the same field of endeavor, the examiner next must determine whether the reference is reasonably pertinent to the particular problem at issue—whether the reference logically would have commended itself to an inventor’s attention in consideration of his problem. To answer this question, the purposes of both the invention and the prior art are important. The problem addressed by the present application is maintaining control of articles being laterally diverted on to diverts in a positive sortation sorter, particularly articles being diverted at high longitudinal speeds. The problem addressed by Piron is an improved longer lasting platen with good wear resistance and low frictional resistance for sliding on the conveyor tubes yet also having a higher friction surface for gripping transported articles. This specific problem addressed by Piron is not pertinent to the problem at issue in the present application. Furthermore, the aligning conveyor of Piron is not reasonably pertinent to the problem of the present invention. The Declaration evidences this stating “... the device disclosed in [Piron] carries the product by using a platen in contrast to the positive sorters which push the product laterally off the sorter and onto a take away conveyor. In my opinion the Piron Sorter patent is not relevant to the ‘070 application, and would not be considered relevant to the ‘070 application by engineers or other persons who design or develop positive sortation sorters”. ¶7 Applicants note that this statement addresses all persons who design or develop positive sortation sorters, which encompasses persons having ordinary skill in this art.

As indicated in the Declaration, Mr. Alderink as well as engineers or other persons who design or develop positive sortation sorters, faced with overcoming the problems of increasing the cartons per minute rate or of operating sorters at higher speeds, would not consider the device disclosed in Piron to be relevant. Declaration ¶7. The device disclosed in Piron is used in a different industry and is directed to moving product from one conveyor line to another line that is running parallel to the sorter, Declaration ¶7, not off the side of the sorter to take away lines.

Piron relates to a conveyor that employs platens to carry articles. Articles on the conveyor of Piron are realigned with a desired exit conveyor located at the end of the conveyor (a 0° angle). The realignment occurs by moving the platen or platens on which an article is supported and carried. The article is always in contact with the platens, so there is no initial contact zone.

Additionally, as indicated in the Declaration, overlooking the fact that Piron is non-analogous art, it would not have been obvious to modify Kelsey in view of Piron to reach the rejected claims. Mr. Alderink states in the Declaration that the differences between a sorter with a linear guide path and a sorter with an arcuate guide path would not be obvious to a person having ordinary skill in this art. Declaration ¶9 “A sorter with an arcuate guide path with an entrance disposed less than 20 degrees, and a sorter with a divert guide path having a plurality of divert angles with an initial contact zone portion disposed at less than 20 degrees are both not obvious. ... It is unique and not obvious to a person having ordinary skill in this design area.” Declaration ¶9

Mr. Alderink continues on to state “For the past several decades, development engineers at at least a dozen suppliers have spent millions of dollars and thousands of hours attempting to enhance positive sortation. It should be noted that the ‘070 application is the 1st time that anyone in the area of positive sortation has ever used this concept of an arcuate guide path. ... It is unique and not obvious to a person having ordinary skill in this design area.” Declaration ¶9.

The July 30, 2008, Office Action presents substantially the grounds for the same rejections as did the September 25, 2007, Office Action. Applicants response to these rejections and grounds in the July 30, 2008, Office Action are the same as Applicants previously made in the Response filed on March 25, 2008, and in the interest of efficiency, Applicants incorporate the substance of that Response herein by reference. The Examiner’s attention is thus directed to the March 25, 2008, Response.

The present amendments to claims 13, 37 and 174 recite that the divert guide path is configured to guide pushers to distribute the force which laterally accelerates the articles to be diverted over a longitudinal and lateral distance without applying an abrupt force to the articles so that control is maintained. There is no teaching suggestion or motivation in Piron or Kelsey, or from the problem faced by the inventors that would lead a person of ordinary skill in the art to configure the guide path in this manner. This configuring of the guide path to function in the

recited manner to maintain control of articles would not result from the Examiner's proposed combination, nor would a person of ordinary skill in the art be led to make such a combination.

New independent claim 175 (previously introduced in the March 25, 2008, Response), which falls within the elected species or invention, parallels original claim 13 and dependent claims 33 and 34. These dependent claims were indicated as containing allowable subject matter; therefore, it is respectfully submitted that new independent claim 175 is in connection for allowance.

New independent claim 176 (previously introduced in the March 25, 2008, Response), which falls within the elected species or invention, parallels the limitations contained in independent claim 37 and dependent claim 49, including those of the intervening dependent claims (i.e., claims 46 and 48). Dependent claim 49 was indicated as containing allowable subject matter; therefore, it is respectfully submitted that new claim 176 is in condition for allowance.

CONCLUSION

In view of the evidence set forth in the Declaration, it is clear the rejections of the pending claims based on the combination of Kelsey and Piron should be withdrawn. If the Examiner is of the view that all of the pending claims of the application are not in clear condition for allowance, it is requested that the Examiner telephone the undersigned for purposes of conducting a telephone interview to resolve any differences. Accordingly, an early notice of allowance is earnestly solicited.

The Assistant Commissioner for Patents is authorized to charge any deficiency or credit any overpayment to Frost Brown Todd LLC Deposit Account No. 06-2226.



Edwin R. Acheson, Jr.
Registration No. 31,808
Telephone (513) 651-6708

FROST BROWN TODD LLC
2200 PNC Center
201 East Fifth Street
Cincinnati, Ohio 45202-4182

October 30, 2008